

# Notice of Allowability

Application No.

10/638,151

Examiner

Deborah Malamud

Applicant(s)

LARSSON, AKE

Art Unit

3766

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendments received 02 April 2007.
2. ☒ The allowed claim(s) is/are 2,3,6,7 and 9.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☒ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02 April 2007 has been entered. Claims 1, 4-5 and 8 are cancelled; claims 2-3, 6-7 and 9 are pending.

### ***Drawings***

2. In view of the amendments received 27 February 2007, the examiner withdraws the objection to the drawings.

### ***Specification***

3. The examiner draws attention to paragraphs 0001 and 0003, which were noted in the previous Final Office Action, and which appear to have missing letters or inappropriate spacing. The objection is therefore maintained, until these titles and any other errors are corrected.

***Oath/Declaration***

4. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.
5. The oath or declaration is defective because: Specifically, a corrected statement should read, "I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations 1.56."

***Claim Rejections - 35 USC § 112***

6. In view of the amendments received 27 February 2007, the examiner withdraws the rejection of claim 7 under 35 USC 112, first paragraph.

***Response to Arguments***

7. Applicant's arguments, see "Remarks," filed 27 February 2007, with respect to claims 2-3, 6-7 and 9 have been fully considered and are persuasive. The rejection of these claims under 35 USC 103(a) has been withdrawn.

***Allowable Subject Matter***

8. Claims 2-3, 6-7 and 9 are allowed.
9. The following is an examiner's statement of reasons for allowance:

Claim 7, a nerve stimulation device comprising a pulse generator which generates stimulation pulses; an electrode arrangement connected to the pulse generator configured to interact with a living subject to deliver the stimulation pulses to stimulate the phrenic nerve; a cardiac signal detector configured to obtain an ECG signal from the living subject indicative of a degree of stimulation of the vagus nerve of the living subject associated with the stimulation of the phrenic nerve by said stimulation pulses; and a regulating unit connected to said cardiac signal detector and to said pulse generator for regulating the pulse generator dependent on the ECG signal to reduce said degree of stimulation of the vagus nerve by said stimulation pulses.

It is well known in the art of nerve stimulators to provide a pulse generator and electrode arrangement configured to stimulate a nerve, such as the phrenic or vagus nerve, in order to produce or block an outcome. It is also well known to modify stimulation of a nerve utilizing electrical signals, such as an ECG, in a feedback loop. It was however neither explicitly taught nor obvious to one of ordinary skill in the art at the time the invention was made to provide a regulating unit for regulating a pulse generator-produced stimulation of a phrenic nerve dependent on an ECG signal, in order to reduce the degree of stimulation of a vagus nerve by the stimulation of the phrenic nerve.

10. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Conclusion**

11. This application is in condition for allowance except for the following formal matters:

There are multiple spacing and typographical errors in the specification, which were noted in previous Office Actions, and above. Also, a corrected Oath is required.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935).

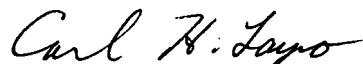
A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah Malamud whose telephone number is (571) 272-2106. The examiner can normally be reached on Monday-Friday, 9.00am-5.30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Layno can be reached on (571) 272-4949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
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